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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,916	06/08/2001	Takeshi Okada	392.1717	7079

21171 7590 10/24/2006  
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EXAMINER

BOES, TERENCE

ART UNIT PAPER NUMBER

3682

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/875,916

Applicant(s)

OKADA ET AL.

Examiner

Terence Boes

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-3, 12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 07/10/2006.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Claims 1-3, 12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation "...so that a rotational phase of the second member relative to the rotating member is constant ..." renders the claim indefinite. Is applicant simply attempting to claim that the second member is connected to, and rotates with the rotating member, or rather is applicant referring to a sinusoidal phase associated with the eccentric rotation? The examiner notes that the meaning of this recitation may have been lost due to language translation. This examiner has construed the claim to mean simply that the second member is connected to, and rotates with the rotating member.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 12 and 14, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Pat. 9-57678.

Japanese Pat. 9-57678 discloses a joint structure of a robot, comprising a speed reducer; a first member 11; a second member 13 connected to the first member through

Art Unit: 3682

the speed reducer to rotate relative to the first member; a positioning pin (set screw as seen in figure 1) and a motor 50 having a shaft, the motor to drive the second member to rotate relative to the first member, wherein the speed reducer includes a first-stage speed reducing mechanism and a second-stage speed reducing mechanism, the first-stage speed reducing mechanism includes an input gear 52 connected directly to the shaft 51 of the motor and spaced from a center of rotation of the speed reducer, a single spur gear (53) in mesh with the input gear, the second-stage speed reducing mechanism includes a crankshaft 37a connected directly to the spur gear, an external gear 21 which engages the crankshaft to be rocked eccentrically, a casing 19 of the speed reducer, an internal gear 20 which is formed inside the casing and is in mesh with the external gear, and a rotating member 26 which supports the crankshaft for rotation and can rotate around the central axis of the internal gear with respect to the casing, the casing of the second-stage speed reducing mechanism is attached to the first member 11, the second member 13 is attached to the rotating member of the second-stage speed reducing mechanism, and the motor 50 is attached to the second member 13, with the shaft of the motor 51 shifted with respect to a center of rotation of the rotating member of the speed reducer, so that the input gear of the motor is in mesh with the spur gear of the first-stage reducing mechanism, the rotating defining a through hole passing there through, the center of rotation of the rotating member being within the through hole; said second member and said rotating member being attached via said positioning pin so that a rotational phase of the second member relative to the rotating member is constant and a mounting portion (between 28 and 13) with a

circumferential groove, and an axis of the second member is aligned with the axis of the output of the speed reducer (fig. 1).

***Response to Arguments***

3. Applicant's arguments filed 08/15/2006 have been fully considered but they are not persuasive.

Applicant argues:

1. JP '678 does not disclose a positioning pin.
  - a. In response, the examiner considers the set screw to be a positioning pin as it serves to positioning elements and is shaped, and functions as a pin.
2. ...this screw attaches different elements of the carrier 26 together, not the carrier 26 and the rotating body.
  - a. In response, the examiner agrees with the applicant's assertion that a screw passes into the lower flange 27 and the upper flange 28 of the carrier 26. Furthermore, the examiner notes that the rotating body is considered to be (26) as indicated in this and prior actions. The rotating body comprises both parts 27 and 28 (as can be seen in figures 1 and 3), which clearly rotate together as they are attached via setscrew. Furthermore, 13 is attached directly to 28, therefore "said second member (13) and said rotating member (26) [are] attached via said positioning pin" as claimed.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

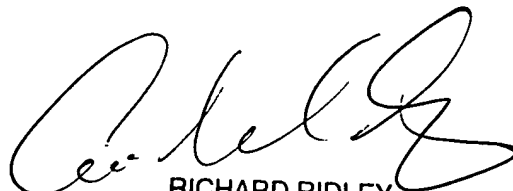
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TB  
10/17/06



RICHARD RIDLEY  
SUPERVISORY PATENT EXAMINER